

ALGEBRA 2 CP  
CHAPTER 2 B REVIEW

**Evaluate the function for the given value of  $x$ .**

$$f(x) = \begin{cases} \frac{1}{2}x - 1 & \text{if } x < 4 \\ 2x - 6 & \text{if } x \geq 4 \end{cases}$$

$$h(x) = \begin{cases} 2x + 3 & \text{if } x \leq -1 \\ -x & \text{if } x > -1 \end{cases}$$

1.  $f(4)$

2.  $h(0)$

3.  $f(-2)$

4.  $f(5)$

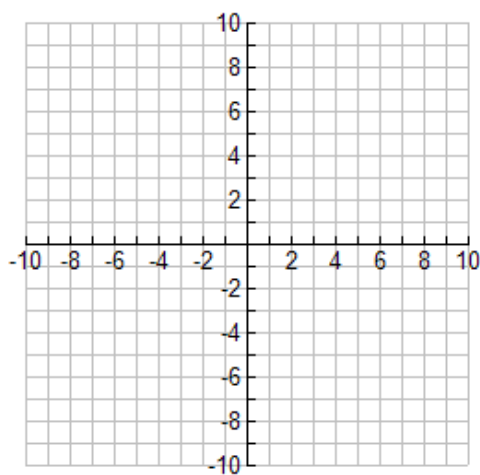
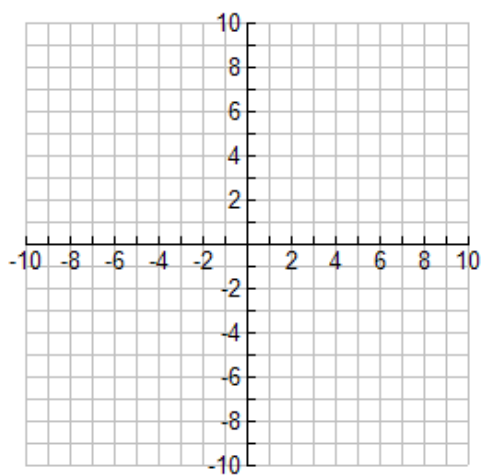
5.  $h(-1)$

6.  $h(-4)$

**Graph each piecewise function.**

7.  $f(x) = \begin{cases} \frac{1}{2}x - 3 & \text{if } x \geq -3 \\ -x + 3 & \text{if } x < -3 \end{cases}$

8.  $f(x) = \begin{cases} 6 & \text{if } x \leq 2 \\ -\frac{2}{3}x & \text{if } x > 2 \end{cases}$



**9. A pizza with 2 toppings costs \$8.25 and a pizza with 5 toppings costs \$11.10. Let  $c$  and  $t$  be the variables.**

- a) What is the independent variable?
- b) What is the dependent variable?
- c) What is the slope? What does it mean?
- d) Write a model for the situation.
- e) If a supreme pizza has 8 toppings, what would be its price?
- f) What is the  $c$ -intercept? What does it mean?
- g) Sketch a graph of the situation.